

1970455016

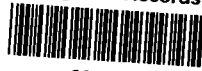
Insta-Foam

Will-Co.

ILD043912922

SF/HRS

EPA Region 5 Records Ctr.



291981

CERCLA

SITE TEAM EVALUATION
PRIORITIZATION / *EST*



Illinois Environmental
Protection Agency

CERCLA
SITE TEAM EVALUATION PRIORITIZATION / *EST*

for:

Insta-Foam Corporation
ILD 043912922 / LPC 1970455016
CREST Hill, ILLINOIS

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
SITE ASSESSMENT UNIT

Sept 29, 2000
~~NOVEMBER 1999~~

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- C. Analytical Results (under a separate cover)

SECTION 1 SITE BACKGROUND

1.1 INTRODUCTION

On September 3, 1999 the Illinois Environmental Protection Agency's Site Assessment Unit was tasked by Region V, of the United States Environmental Protection Agency (U.S. EPA) to conduct a Site Team Evaluation Prioritization (STEP) of the Insta-Foam Site (ILD 043912922 / LPC 1970455016) in Will County, Crest Hill, Illinois. The Insta-Foam Site was placed on the Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) in September of 1990.

The site originated as a limestone quarry in the late 1800s until the 1920s. After this the site was backfilled with a variety of materials. Refer to the site history section of this report for more detailed information on these materials and site operations. The Preliminary Assessment (PA) was conducted in April of 1991, and a Screening Site Inspection (SSI) in September of 1992. Insta-Foam also had a hydrogeologic investigation conducted by REMCO, in 1990.

1.2 SITE DESCRIPTION

The Insta-Foam site is located on the northwest corner of Chaney Avenue and Broadway Street (US Route 53), and is surrounded by a residential area to the west and south, Industrial/agricultural to the north, and Industrial/commercial to the east. The site occupies a total of nine acres, four of which were quarried and later filled.
(see Figures 1, 2)

The site topography is generally flat with a steep bluff forming the western border and has a small pond on the northwest corner of the site. Currently, several large buildings border the former quarry area.

1.3 SITE HISTORY

The site began in late 1800s, as a limestone quarry that operated until the 1920s. The quarry occupied approximately four acres. Over time the quarry was backfilled with a variety of materials including, construction/demolition debris, fire debris, and most notably tank bottoms from a nearby Texaco Refinery. The tank bottom disposal activities took place under the ownership of Jack Carlestrom for his Lockport trucking company.

In 1972, a foam insulated pipe manufacturer called Rovanco began operations at the site. Sometime in 1975, Insta-Foam Products purchased the facility and later in 1984, Insta-Foam became part of a company called Flexible Products.

1.4 REGULATORY STATUS

This section addresses any other EPA programs that may be associated with the Insta-Foam Site. Given the nature of the operations it is unlikely that the site was or is subject to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), the Atomic Energy Act (AEA), or the Uranium Mill Tailings Radiation Control Act (UMTRCA).

SECTION 2 SITE TEAM EVALUATION

PRIORITIZATION ACTIVITIES

2.1 RECONNAISSANCE INSPECTION

A site reconnaissance of the site was conducted in October 1999, when the author met with the current plant environmental affairs person. At that time the author outlined general CERCLA program objectives and goals for this inspection. The author conducted a visual walk around inspection of the facility looking for potential sample locations, condition of existing monitoring wells and surface water run-off patterns.

As a result, several soil boring locations were located for future sampling. The author also identified an adequate number of monitoring wells in good condition to be used during the STEP Inspection. At the conclusion of this visit Insta-Foam granted the Illinois EPA, access to collect samples in late November.

The reconnaissance then moved off-site to located any public or private drinking water wells. In this case no private wells were located but one municipal well for the City of Crest Hill was identified approximately one half mile west of the site for future sampling.

The author also looked for any drainage for surface water run-off and concluded that the on-site pond collects a majority of the sites run-off.

2.2 INTERVIEWS

Before the reconnaissance inspection of the facility, the author met with an environmental affairs representative for Flexible Products. This representative wanted the Illinois EPA to recognize that Insta-Foam / Flexible Products did not take part in the backfilling of the quarry. The representative also referred to a March 1990, Remcor report that found no significant migration of a free product layer under the surface of the site. However, this report did not address the potential for a nearby Crest Hill public well to be impacted by the former quarry area.

2.3 SAMPLING ACTIVITIES

The CERCLA STEP Inspection field sampling activities took place on November 29, and 30, 1999. One municipal well, three on-site monitoring wells were sampled and six on-site soil samples were collected in accordance with the Illinois EPA sampling methods and procedures. The samples were collected to characterize the free product plume and determine if those contaminants have impacted the local groundwater and nearby public well. Figure 4, identifies the sample locations from the November 1999, STEP Inspection, and the analytical results are summarized in Table 1, and Table 2, sample descriptions are located in Table 3. The samples were analyzed by a USEPA contract laboratory through the Contract Laboratory Program (CLP).

2.4 SAMPLING RESULTS

The groundwater sample from the municipal well had elevated levels of barium, lead,

magnesium, and manganese. These same four contaminants were found in two of the on-site monitoring wells and in three of the on-site soil borings.

In addition to these contaminants the on-site groundwater samples also had elevated levels of: caprolactam, 2-methylnaphthalene, aluminum, arsenic, cadmium, chromium, cobalt, copper, mercury, nickel, zinc, and cyanide.

The on-site soil borings had elevated levels of: dichlorodifluoromethane, trichlorofluoromethane, cyclohexane, xylene (total), isopropylbenzene, phenol, 2-methylphenol, 4-methylphenol, 2,4-dimethylphenol, naphthalene, 2-methylnaphthalene, acenaphthalene, dibenzofuran, fluorene, phenanthrene, anthracene, carbazole, di-n-butylphthalate, fluoranthene, pyrene, butylbenzylphthalate, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, benzo(g,h,i)perylene, aluminum, arsenic, cadmium, chromium, copper, mercury, nickel, selenium, vanadium, and zinc. (See Table 1, and Table 2)

SECTION 3

IDENTIFICATION OF SOURCES

3.0 INTRODUCTION

This section identifies and evaluates the hazardous waste sources found at the site during the initial stages of the CERCLA STEP Investigation.

Information concerning size, volume, waste type and waste composition of each source is compiled during the initial reconnaissance visit and subsequent CERCLA STEP Inspection. The Insta-Foam Products site has one source that can be identified and used for HRS scoring purposes. That source is the landfill area which occupies the former limestone quarry. Further investigations may reveal additional sources or uncover previously undocumented information about existing sources.

3.1 LANDFILL

The landfill occupies a four acre area that originated as a limestone quarry. This area has over the course of several years been backfilled with a variety of materials including: slag, concrete, wood, refractory brick, fire debris, and tank bottoms from a nearby oil refinery. The depth of the quarry ranges from 15-20 feet below the surface of the current site. The fill material is five to ten feet thick in this area. This has been confirmed by numerous soil borings and installation of several monitoring wells. Groundwater is routinely encountered at 10 feet below the current surface of the site. In some areas of the fill, oily wastes are present on top of the water table.

SECTION 4 MIGRATION PATHWAYS

4.0 MIGRATION PATHWAYS

The CERCLA Hazard Ranking System identifies three migration and one exposure pathway by which hazardous substances may pose a threat to human health and/or the environment.

Consequently, sites are evaluated on their known or potential impact to these four pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

This section includes data and information collected during the CERCLA STEP Inspection together with information documented from other sources, which maybe useful in analyzing the impact of the Insta-Foam site on the four pathways and various human and environmental targets within the established target distance limits.

4.1 GROUNDWATER PATHWAY

The Insta-Foam site is underlain directly by one major water-bearing geologic formation known as the Niagarian Formation of Silurian Age. The Niagarian Formation is characterized by cherty dolomite of a buff-yellow color, thin-bedded, and highly weathered, commonly known as limestone. Groundwater occurrence for this site is primarily within the dolomite bedrock, where flows occur along fractures, bedding planes, and solution channels. This shallow bedrock aquifer is locally recharged from annual precipitation. The primary regional discharge is expected to be the Des Plaines River, which is located approximately a half mile east of the site. The aquifer of concern (AOC) is located in the Richmond Shale, found under the Niagarian Formation.

Within the CERCLA four mile radius Target Distance Limit (TDL), there are several wells utilizing groundwater potentially impacted by groundwater migration from Insta-Foam. Within a half mile to the west is a City of Crest Hill municipal well, and to the east two industrial

production wells, one mile to the north Stateville State Prison drinking water well, and one and a half miles to the southwest are the City of Joliet municipal wells.

4.2 SURFACE WATER PATHWAY

The surface water pathway starts where run-off from the site enters the first perennial water way. This location is referred to as the probable point of entry (PPE). Surface water for this site primarily collects in an on-site pond and any point where this run-off enters it is defined as the PPE. This pond is in the northwest corner of the site and appears to be part of the former limestone quarry; it does not have any identifiable out-flow and appears to be an isolated water body. In many cases isolated water bodies similar to this one recharge the local groundwater, potentially this could be occurring at this site. There also exist the possibility that this shallow groundwater unit is connected to the near by river and we have groundwater to surface water flow.

According to the National Wetlands Inventory there are no emergent or forested wetlands contiguous with the on-site pond (see figure 3). At this point there is no evidence that people fish in the pond and it is not considered a fishery at this time. Due to the fact that this is an isolated water body there is no 15 mile surface water target limit distance associated with the site.

4.3 AIR PATHWAY

Air samples were not collected during the STEP inspection. The contamination is primarily subsurface and materials becoming air-borne is not a concern at this time.

4.4 SOIL EXPOSURE PATHWAY

The soil exposure pathway looks at contaminants in the upper two feet of the sites surface. The soil borings in the landfill indicated at least four feet of uncontaminated fill material cover the contaminated wastes. No additional soil samples were collected in the upper two feet of the landfill and the soil exposure pathway does not appear to be a concern at this site.

5.0 ADDITION RISK BASED OBJECTIVES

This section provides an evaluation which compares data generated during STEP activities with additional analytical benchmarks. These benchmarks compare soil, sediment, and/or groundwater data with specific risk based criteria. The objectives discussed in this section have not been used to assess the site for Hazard Ranking Systems (HRS) purposes.

5.1 TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO)

The Illinois EPA's TACO guidance document (35 IL Adm. Code Part 742), can be used to develop site specific remediation objectives for sites being addressed under the Illinois Site Remediation Program. This document discusses key elements required to develop risk-based Remediation objectives for sites being addressed under the Illinois Site Remediation Program. This document discusses key elements required to develop risk-based Remediation objectives, how background values may be used, and provides guidance through three tiers of the risk-based approach. The Illinois EPA uses this guidance, and the groundwater standards established in 36

IL Adm. Code 620, to determine soil and groundwater Remediation objectives.

Groundwater contaminants found during the November 1999, CERCLA investigation have been compared to the Tier 1, Groundwater Remediation Objectives for the Direct Ingestion of Groundwater Portion of the Groundwater Ingestion Route. Based on the TACO definition of Class I and Class II groundwater, the author has determined that the samples collected will be considered Class I.

Groundwater at the site exceeded the Class 1, Groundwater Remediation Objectives for: arsenic, cadmium, chromium, lead, manganese, and nickel.

Soil contaminants found during the November CERCLA investigation have been compared to Tier 1, Soil Remediation Objectives for Industrial/Commercial Properties. The soils at Intsa-Foam exceeded these levels for: benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, arsenic, and lead.

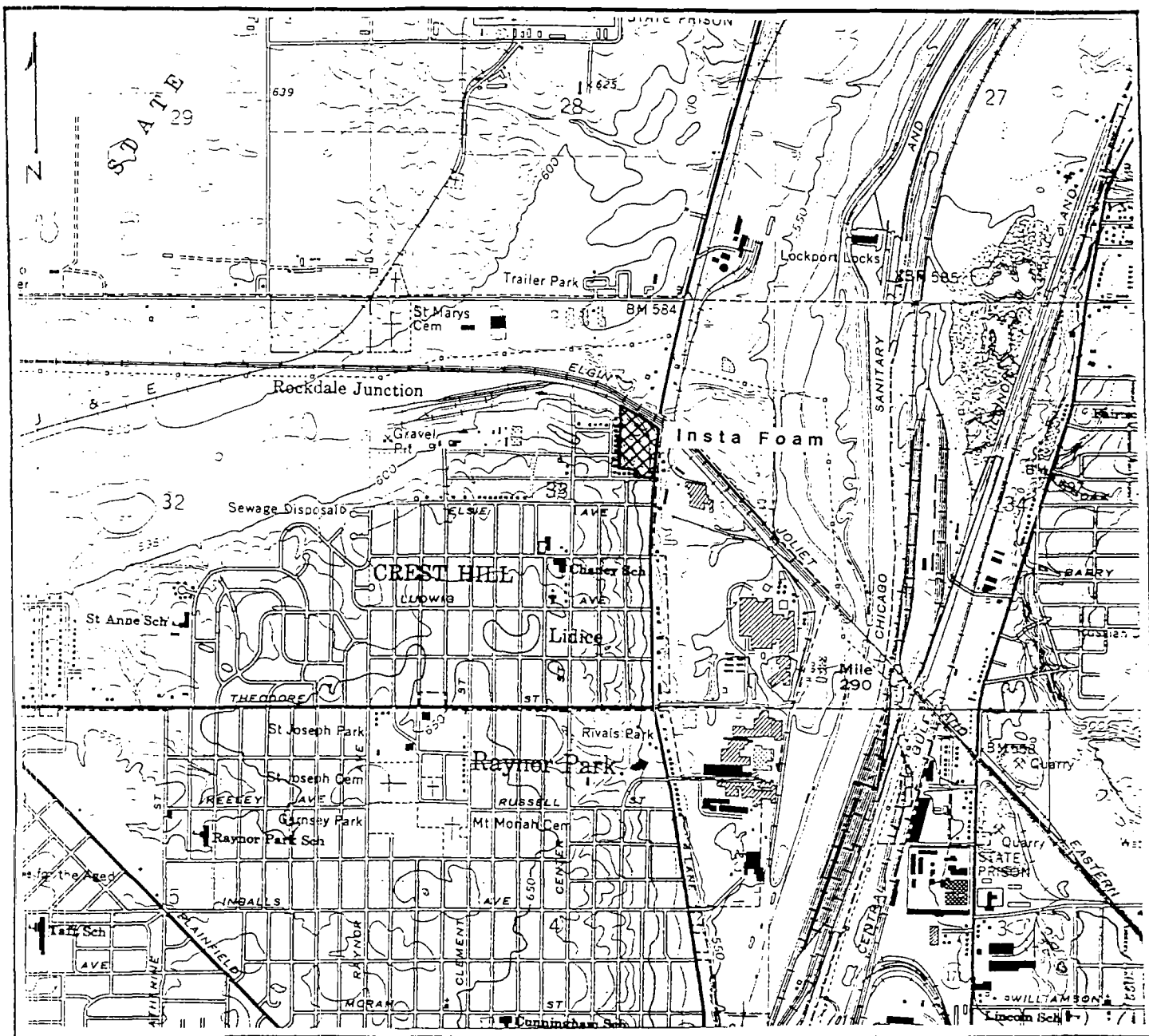
Insta Foam



SITE LOCATION

INSTA-FOAM
SITE LOCATION MAP

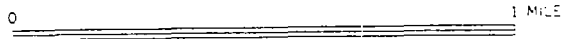
FIGURE 1



Source: IEPA 1990. Base Map: USGS 1973, Joliet, IL 7.5 minute quadrangle

AREA MAP

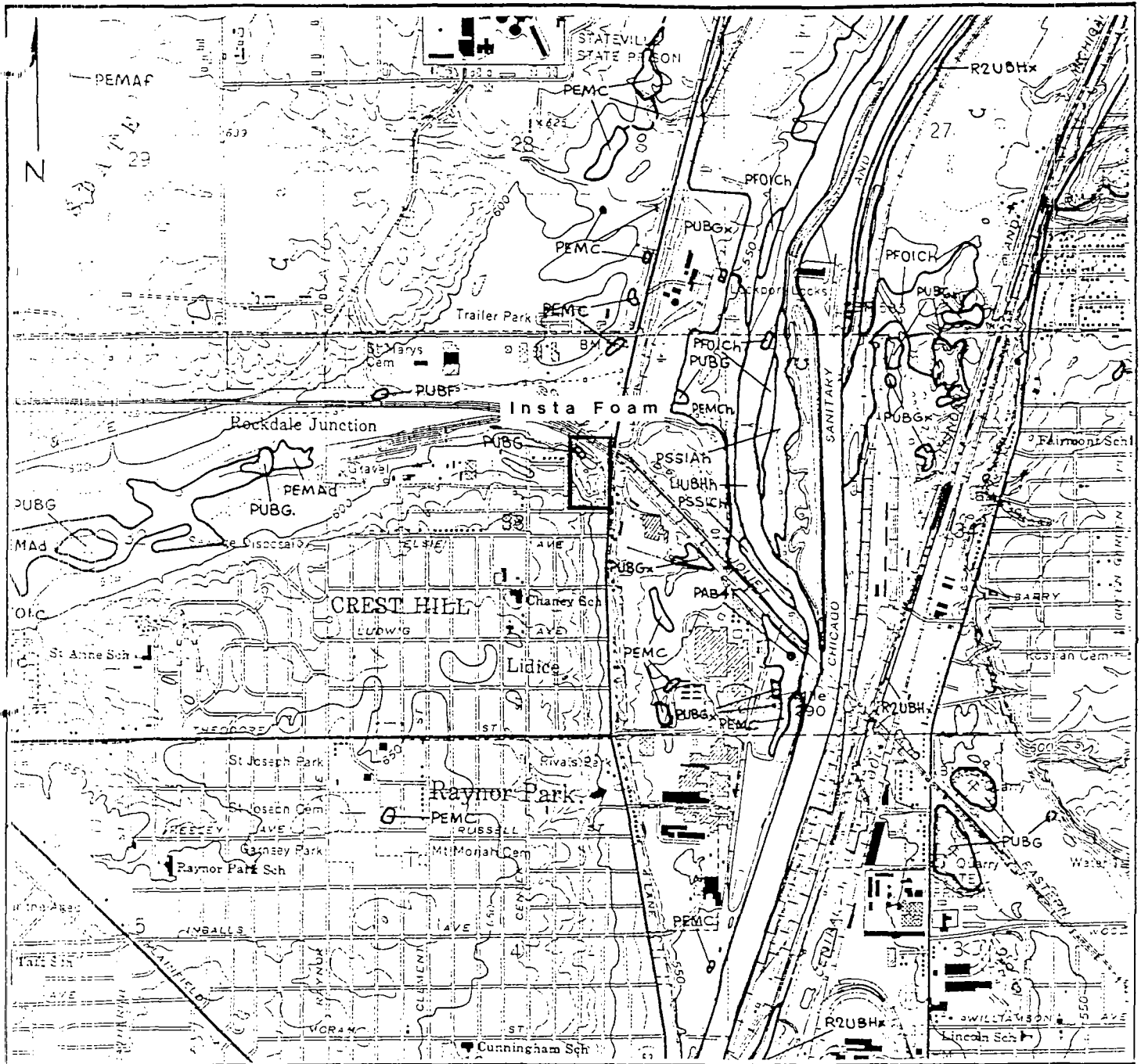
SCALE 1:24000



INSTA-FOAM
SITE TOPOGRAPHY MAP
FIGURE 2

INSTA-FOAM AREA WETLAND MAP

FIGURE 3



Source: USFWS Wetlands Inventory Map, 1983, Joliet, IL

Wetlands Inventory Map

SCALE 1:24 000

SYSTEM

P — PALUSTRINE

CLASS	PS — ROCK BOTTOM	US — UNCONSOLIDATED BOTTOM	AS — AQUATIC BED	US — UNCONSOLIDATED SHOPE	ML — MOSS-LICHEN	EM — EMERGENT	SS — SCRUB-SHRUB	FO — FORESTED	OW — OPEN WATER: UNKNOWN BOTTOM
Bedrock	1 Bedrock 2 Rubble	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic	1 Algal 2 Aquatic Moss 3 Rooted Vascular 4 Floating Vascular 5 Unknown Submergent 6 Unknown Surface	1 Cobble-Gravel 2 Sand 3 Mud 4 Organic 5 Vegetated	1 Moss 2 Lichen	1 Persistent 2 Nonpersistent	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Decid 6 Deciduous 7 Evergreen	1 Broad-Leaved Deciduous 2 Needle-Leaved Deciduous 3 Broad-Leaved Evergreen 4 Needle-Leaved Evergreen 5 Decid 6 Deciduous 7 Evergreen	



INSTA-FOAM
SAMPLE LOCATION MAP
FIGURE 4

Insta-Foam Corporation
ILD 043912922/ LPC 1970455016
TABLE 1, SOIL SAMPLE SUMMARY

SAMPLING POINT	X102	X103	X104	X105	X106	X107
VOLATILES ug/kg						
Dichlorodifluoromethane	13	24	--	--	--	--
Trichlorofluoromethane	39	58	--	--	--	--
Methylene Chloride	9J	6J	1200J	--	1800J	7J
Acetone	180	59	1800	--	--	--
Carbon Disulfide	8J	3J	--	--	--	--
2-Butanone	--	6J	--	--	--	--
Cyclohexane	--	--	2800	--	--	--
Benzene	4J	--	--	--	--	--
Ethylbenzene	8J	--	600J	--	--	--
Xylene (total)	30	--	--	--	--	4J
Isopropylbenzene	--	--	2200	--	--	--
SEMIVOLATILES ug/kg						
Benzaldehyde	270J	370J	--	120J	--	87J
Phenol	670	600	--	35J	1600	--
Acetophenone	--	--	--	--	--	42J
2-Methylphenol	780	1400	--	--	--	--
4-Methylphenol	1800	--	--	35J	640	--
1,4-Dimethylphenol	550	450	--	--	--	--
Naphthalene	1200	560	6400J	160J	6200E	41J
2-Methylnaphthalene	750	720	150000E	520	10000E	71J
1,1'-Biphenyl	300J	140J	--	39J	960	--
Acenaphthylene	59J	160J	--	--	--	77J
Acenaphthene	2900	670	7700J	590	3000	27J
Dibenzofuran	2100	--	6700J	110J	2100	--
Diethylphthalate	30J	--	--	21J	--	--
Fluorene	3000	730	18000	240J	3900	64J
Phenanthrene	17000E	3700E	74000	800	14000E	130J
Anthracene	5800E	1100	5600J	220J	5800E	54J
Carbazole	3100	600	--	95J	2200	37J
Di-n-Butylphthalate	83J	380J	--	230J	670	28J
Fluoranthene	19000E	4200E	3400J	770	12000E	180J
Pyrene	17000E	3100	18000	810	11000E	190J
Butylbenzylphthalate	--	--	--	3200	--	--
Benzo(a)anthracene	8000E	1600	15000	580	6400E	140J
Chrysene	7000E	1700	23000	620	6600E	160J
bis(2-Ethylhexyl)phthalate	--	--	1200J	--	--	--
Benzo(b)fluoranthene	7100E	1600	4800J	370J	4700	160J
Benzo(k)fluoranthene	4700E	970	--	260J	3700	97J
zo(a)pyrene	6900E	1300	5200J	500.00	5000E	160J
flueno(1,2,3-cd)pyrene	4000E	810	740J	260J	2700	120J
Dibenz(a,h)anthracene	--	330J	2500J	260J	1300	68J
Benzo(g,h,i)perylene	--	850	2200J	380J	2700	120J

Insta-Foam Corporation
ILD 043912922/ LPC 1970455016
TABLE 1, SOIL SAMPLE SUMMARY

SAMPLING POINT	X102	X103	X104	X105	X106	X107
INORGANICS mg/kg						
Aluminum	7830	7000	4230	3260	19000	9540
Arsenic	9.2	8.3	8	4.5	8.2	8
Barium	107	91	--	--	150	91.8
Cadmium	4.6	1.50	--	--	7.6	--
Calcium	56300	70800	125000	109000	35000	64900
Chromium	50.1	59.7	142	8.1	137	13.4
Copper	59.4	63.7	26.6	17.3	55.8	18.5
Iron	15200	18900	14700	20300	18000	15300
Lead	118	114	319	48.7	665	50.1
Magnesium	21400	37000	76400	63300	22000	40300
Manganese	271	292	298	251	307	407
Mercury	--	0.13	0.39	--	0.14	0.06
Nickel	32.3	34.6	20.9	14.2	40.3	14.5
Potassium	--	--	--	--	1590	1370
Selenium	--	--	--	--	1.9	--
Sodium	1400	1900	--	--	26100	--
Vanadium	21	17.1	--	25.7	20.4	21.7
Zinc	264	222	74.2	81.2	398	69.2

Insta-Foam Corporation
ILD 043912922/ LPC 1970455016

TABLE 2, GROUNDWATER SAMPLE SUMMARY

SAMPLING POINT	G201	Field Blank 1	G101	G102	G103	G104	Field Blank 2
VOLATILES ug/L							
Chloroform	0.8J	--	--	--	--	--	--
SEMIVOLATILES ug/L							
Phenol	--	--	--	--	--	0.9J	--
Caprolactam	--	--	76	110E	62	140E	--
2-Methylnaphthalene	--	--	--	19	14	--	--
Acenaphthene	--	--	--	4J	3J	0.9J	--
Dibenzofuran	--	--	--	3J	--	--	--
Fluorene	--	--	--	6J	4J	0.6J	--
Phenanthrene	--	--	--	7J	6J	--	--
Carbazole	--	--	--	2J	2J	--	--
Fluoranthene	--	--	--	0.8J	0.6J	0.8J	--
Pyrene	--	--	--	2J	1J	0.6J	--
Butylbenzyl phthalate	--	--	--	0.7J	--	--	--
Benzo(a)anthracene	--	--	--	2J	1J	--	--
Chrysene	--	--	--	3J	2J	--	--
Benzo(b)fluoranthene	--	--	--	1J	0.7J	--	--
Benzo(a)pyrene	--	--	--	0.8J	0.5J	--	--
INORGANICS ug/L							
Aluminum	--	--	--	29600	41100	591	--
Arsenic	--	--	--	61	89.5	14	--
Barium	55.9	--	--	634	842	--	--
Cadmium	--	--	--	12	16.4	--	--
Calcium	101000	--	110000	520000	669000	444000	--
Chromium	--	--	--	2370	3260	--	--
Cobalt	--	--	--	54.8	80.2	--	--
Copper	--	--	--	383	537	35.2	--
Iron	206	--	--	114000	171000	9970	--
Lead	4	--	--	4430	6500	16.7	--
Magnesium	45800	--	54600	263000	394000	41400	--
Manganese	17.1	--	60.2	1900	2520	630	--
Mercury	--	--	--	1.8	0.85	--	--
Nickel	--	--	--	167	238	--	--
Potassium	5730	--	5830	13800	14900	12600	--
Selenium	--	--	--	--	6	--	--
Sodium	--	--	50700	106000	100000	84100	--
Vanadium	--	7	--	--	--	--	--
Zinc	--	--	--	2400	3220	276	--
Cyanide	--	--	--	24.7	15.8	--	--

Table 3, Sample Descriptions
 INSTA-FOAM CORPORATION
 ILD 043912922 / LPC 1970455016

<i>Sample Date Time</i>	<i>Location</i>	<i>Appearance</i>
G201	City of Crest Hill	Clear no odor
11/29/99 10:30 AM	Well Number 1	
G101	Monitoring well	Clear no odor
11/30/99 12:00 Noon	north edge of fill area	
G102	Monitoring well in	Petrololum odor, dark oily shean.
11/30/99 11:30 AM	south east corner of fill area	
G103	Duplicate of G102	
G104	Monitoring well in	Petrololum odor, dark oily shean.
11/29/99 11:35 AM	south west corner of fill area	
X102	Soil boring near	Sample at 12'
11/29/99 01:30 PM	G104	black fine clay with sand
X103	Duplicate of X102	
X104	Soil boring	Sampled below 12'
11/29/99 03:00 PM	west side of fill	black, wet waste material
X105	Soil boring	Sampled below 12'
11/29/99 03:30 PM	center of fill	black, wet waste material
X106	Soil boring	Sampled below 12'
11/29/99 4:00 PM	near X105	black, wet waste material
X107	Soil boring	Sampled below 12'
11/29/99 4:30 PM	north side of fill	black, wet waste material

APPENDIX

A

CERCLA Inspection Photographs

Date: 11/29/99

Time: 1030 am

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G201

Direction: north

Description: Closest municipal well
for City of Crest Hill.



Date: 11/29/99

Time: 1030 am

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G201

Direction: southh

Description: Closest municipal well
for City of Crest Hill.



Date: 11/29/99

Time: 1135 am

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G104

Direction: west

Description: MW in fill area.



Date: 11/29/99

Time: 1135 am

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G104

Direction: north

Description: MW in fill area.



Date: 11/29/99

Time: 1330pm

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X102 X103

Direction: west

Description: Fill area.



Date: 11/29/99

Time: 1330pm

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X102 X103

Direction: east

Description: Fill area.



Date: 11/29/99

Time: 1500

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X104

Direction: west

Description: Fill area.



Date: 11/29/99

Time: 1500

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

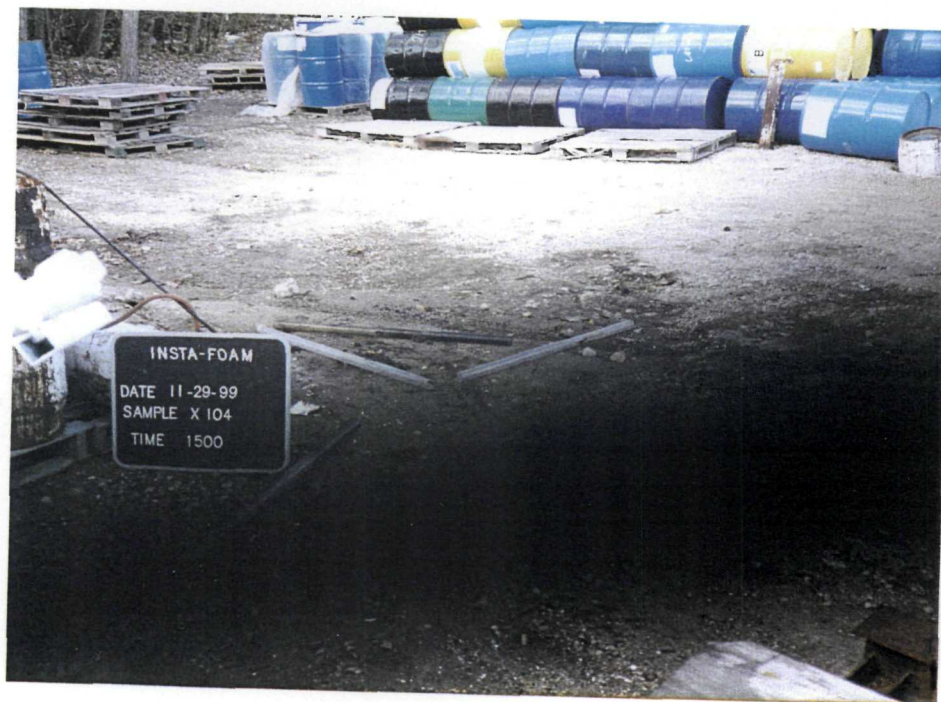
INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X104

Direction: north

Description: Fill area.



Date: 11/29/99

Time: 1530

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

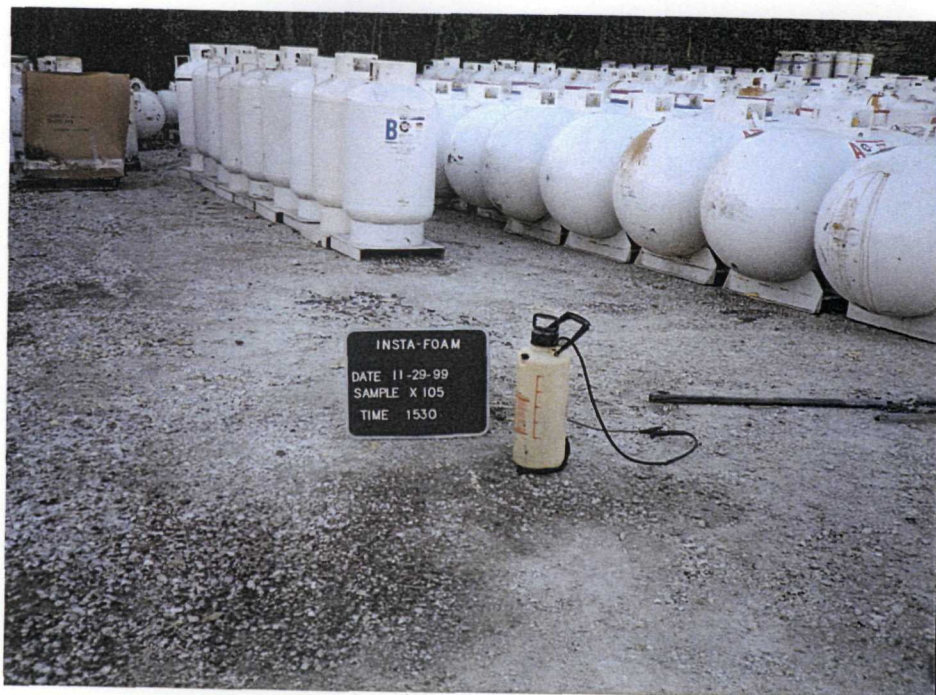
INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X105

Direction: west

Description: Fill area.



Date: 11/29/99

Time: 1530

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

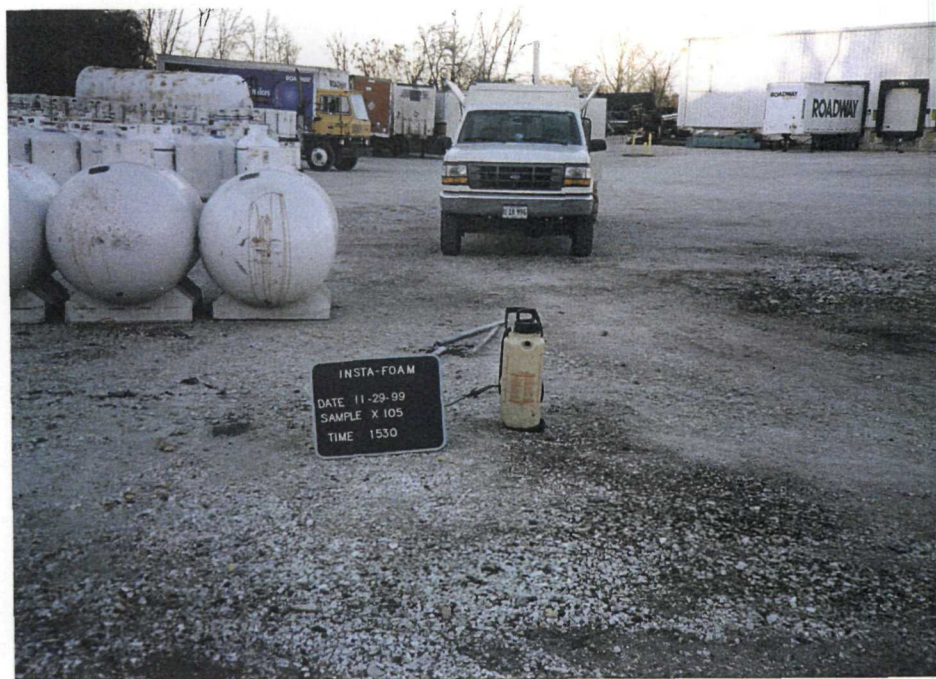
INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X105

Direction: north

Description: Fill area.



Date: 11/29/99

Time: 1600

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X106

Direction: east

Description: Fill area.



Date: 11/29/99

Time: 1600

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X106

Direction: north

Description: Fill area.



Date: 11/29/99

Time: 1630

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X107

Direction: east

Description: Fill area.



Date: 11/29/99

Time: 1630

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: X107

Direction: north

Description: Fill area.



Date: 11/30/99

Time: 1130

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G102/ G103

Direction: north

Description: MW in fill area.



Date: 11/30/99

Time: 1130

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G102/ G103

Direction: west

Description: MW in fill area.



Date: 11/30/99

Time: 1200

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G101

Direction: north

Description: MW in fill area.



Date: 11/30/99

Time: 1200

Photo Taken By: Mark Wagner

Site Name/ILD#/LPC

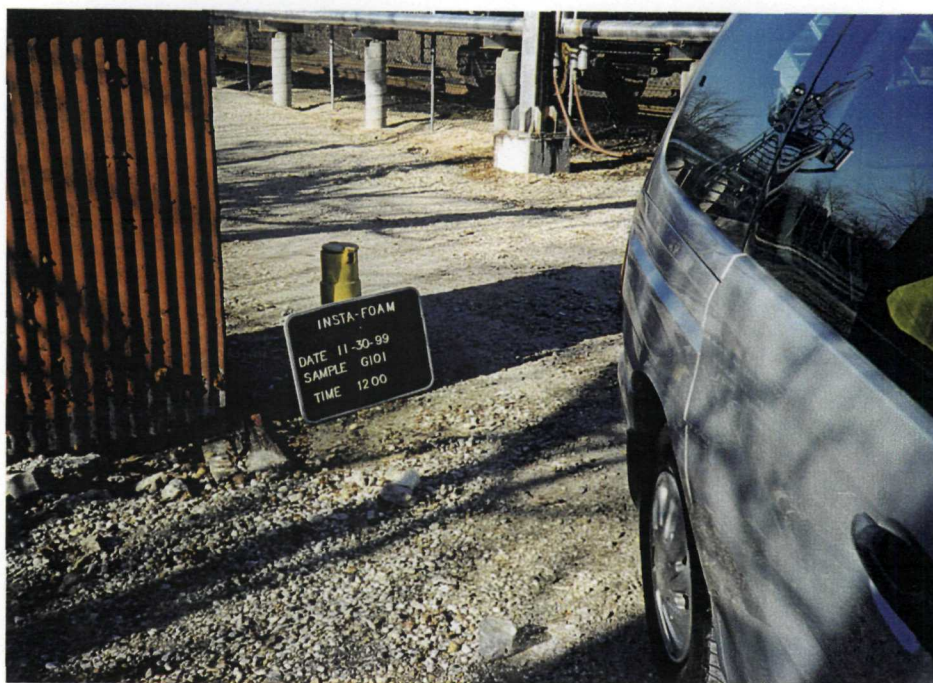
INSTA FOAM

ILD 043912922/ LPC 1970455016

Sample Location: G101

Direction: west

Description: MW in fill area.



APPENDIX

B

TARGET COMPOUND LIST (TCL) &

USEPA DATA QUALIFIERS

DATA QUALIFIER DEFINITIONS

<u>QUALIFIER</u>	<u>DEFINITION ORGANICS</u>	<u>DEFINITION INORGANICS</u>
U	Indicates that the compound was analyzed for but not detected above the CRQL. The CRQL must be corrected for any dilution and percent moisture.	Indicates that the compound was analyzed for but not detected above the instruments detection limit (IDL).
J	Indicates an estimated value. This flag is used when estimating a concentration for TICs where a 1: 1 response is assumed or when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL but greater than zero or when the retention time data indicate the presence of a compound that meets the pesticide/Aroclor identification criteria and the result is less than the CRQL but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Indicates an estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
UJ	The analyte was analyzed for but not detected. The associated value is an estimate and may be inaccurate or imprecise.	The analyte was analyzed for but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.	Method qualifier indicates analysis by Manual Spectrophotometry.
CA	Not Used	Method qualifier indicates analysis by Midi-Distillation Spectrophotometry.

CV	Not Used	Method qualifier indicates analysis by Cold Vapor AA.
B	This flag is used when the analyte was found in the associated blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action	The reported value is less than the contract required detection limit (CRDL) and greater than the IDL.
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again.	The reported value is estimated because of the presence of interference.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Not Used
P	This flag is for a pesticide/Aroclor target analyte when the percent difference for detected concentrations is greater than 25% between the two columns. The lower of the two values is reported on the Form 1 and flagged with a 'P'.	Method qualifier indicates analysis by Inductively Coupled Plasma (ICP) when hotplate digestion is used.
PM	Not Used	Method qualifier indicates analysis by ICP when microwave digestion is used.
M	Not Used	Duplicate injection precision not met (a QC parameter).
A	This flag indicates that a TIC is a suspected aldol-condensation product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA) when hotplate digestion is used.

AM	Not Used	Method qualifier indicates analysis by Flame AA when microwave digestion is used.
AV	Not Used	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not Used	Method qualifier indicates analysis by Semi-Automated Spectrophotometry.
F	Not Used	Method qualifier indicates analysis by Furnace Atomic Absorption (AA) when hotplate digestion is used.
FM	Not Used	Method qualifier indicates analysis by furnace AA when Microwave Digestion is used.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification". This flag is used only for TICs	Spike sample recovery not within the limits (a QC parameter).
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated value represents the approximate concentration.	Not Used
S	Not Used	The reported value was determined by Method of Standard Additions (MSA).
W	Not Used	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance (a QC parameter).
*	Not Used	Duplicate analysis not within control limits. (a QC parameter).

+	Not Used	Correlation coefficient for the MSA is less than 0.995 (a QC parameter).
T	Not Used	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethane (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl)Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis(2-Chloroisopropyl)Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-Chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3,3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Indeno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlorodane
Heptachlor	gamma-Chlorodane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	Sulfate

SPECIAL PESTICIDE LIST

2,4-D

Atrazine

Metolachlor -- Dual

Cyanazine -- Bladex

Fonofos -- Dyfonate

EPTC -- Eptam, Eradicane

Phorate

Metribuzin -- Lexone, Sencor

Trifluralin -- Treflan

Diazinon

Alachlor -- Lasso